

## Pentair R171240

# Pentair R171240 Rainbow HC-3340 Automatic Chlorine/Bromine Feeder User Manual

Model: R171240

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## 1. PRODUCT OVERVIEW

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The Pentair R171240 Rainbow HC-3340 is a high-capacity automatic chemical feeder designed for commercial and large residential pool applications. This feeder is engineered to dispense chlorine or bromine tablets efficiently, ensuring consistent water sanitation.

It has a capacity to hold up to 40 pounds of chemical tablets and can effectively treat pools up to 61,000 gallons with bromine or up to 332,000 gallons with trichlor. The system is completely enclosed, eliminating the need for special venting and preventing the escape of chemical gases. It is designed for 1-inch hard plumbing installations and operates at a maximum pressure of 50 PSI. The unit is NSF listed, confirming its compliance with public health standards.



Image 1.1: Front view of the Pentair R171240 Rainbow HC-3340 Automatic Chlorine/Bromine Feeder.

## 2. SAFETY INFORMATION

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**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

- Always wear appropriate personal protective equipment (PPE) such as gloves and eye protection when handling chemical tablets.
- Never mix different types of chemicals in the feeder. Mixing incompatible chemicals can cause fire, explosion, or release of hazardous gases.
- Ensure the feeder is installed and operated according to all local codes and regulations.
- Keep the feeder lid securely closed when in operation and when storing chemicals.
- Keep out of reach of children and pets.
- Do not inhale chemical fumes. Ensure adequate ventilation if opening the feeder.

## 3. PRODUCT FEATURES

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- **High Capacity:** Holds up to 40 pounds of 1-inch or 3-inch chemical tablets.
  - **Versatile Application:** Suitable for both chlorine and bromine tablets.
  - **Enclosed System:** Designed to be completely enclosed, eliminating the need for special venting and preventing gas escape.
  - **NSF Listed:** Certified for public health and safety standards.
  - **Durable Construction:** Built for longevity and reliable performance in pool environments.
  - **Pressure Rated:** Maximum operating pressure of 50 PSI.

## 4. SETUP AND INSTALLATION

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Proper installation is crucial for the safe and effective operation of your Pentair R171240 feeder. It is recommended that installation be performed by a qualified pool professional.

### 4.1. Location Selection

Install the feeder downstream of the pool heater and filter, and upstream of any check valves or other equipment that could restrict flow. Ensure easy access for filling and maintenance.

### 4.2. Plumbing Connections

1. The feeder is designed for 1-inch hard plumbing installations. Unions are not included and must be purchased separately.
2. Connect the inlet port of the feeder to the pool's return line after the heater and filter.
3. Connect the outlet port of the feeder to the pool's return line, ensuring a secure, leak-free connection.
4. Use appropriate PVC cement and primer for all connections, allowing adequate curing time as per manufacturer instructions.



Image 4.1: Side view of the feeder, showing potential plumbing connection points.

### 4.3. Initial Fill

1. Ensure the pool pump is off and the system is depressurized.
2. Carefully unscrew the feeder lid.
3. Fill the feeder with the desired type of chlorine or bromine tablets. Do not overfill.
4. Securely replace the feeder lid, ensuring the O-ring is properly seated to prevent leaks.

## 5. OPERATING INSTRUCTIONS

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The Pentair R171240 feeder provides a controlled release of sanitizing chemicals into your pool water.

### **5.1. Adjusting Chemical Output**

The feeder typically includes an adjustment valve or dial to control the flow of water through the tablet chamber, thereby regulating the chemical output. Refer to your specific model's markings for precise adjustments.

- Start with a low setting and gradually increase as needed.
- Regularly test your pool water chemistry (chlorine/bromine levels, pH) to determine the optimal setting.
- Make small adjustments and allow several hours for the changes to take effect before retesting.

### **5.2. Refilling the Feeder**

1. Turn off the pool pump and close any isolation valves to the feeder to prevent water flow.
2. Slowly unscrew the feeder lid to release any pressure. Be cautious of residual chemical fumes.
3. Add new chemical tablets, ensuring they are of the same type as previously used.
4. Replace the lid securely, ensuring a tight seal.
5. Open isolation valves and restart the pool pump. Check for leaks.



Image 5.1: Top view of the feeder, highlighting the lid for refilling.

## 6. MAINTENANCE

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Regular maintenance ensures the longevity and efficient operation of your chemical feeder.

- **O-Ring Inspection:** Periodically inspect the lid O-ring for cracks, wear, or damage. Replace if necessary to maintain a watertight seal.
- **Cleaning:** If chemical residue builds up inside the feeder, turn off the pump, drain the feeder, and carefully rinse the interior with fresh water. Do not use harsh chemicals for cleaning.

- **Winterization:** In colder climates, drain the feeder completely and remove any remaining tablets before freezing temperatures arrive. Store the feeder in a dry, protected area if possible, or ensure it is completely empty and dry if left in place.
- **Leak Checks:** Regularly inspect all plumbing connections and the feeder lid for any signs of leaks. Address leaks immediately.



Image 6.1: Bottom view of the feeder, useful for inspecting plumbing and drainage.

## 7. TROUBLESHOOTING

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Problem	Possible Cause	Solution
Low or no chemical output	Feeder empty; adjustment valve closed; clogged lines; tablets dissolved too slowly.	Refill feeder; open adjustment valve; check and clear plumbing lines; ensure proper tablet type.
Chemical odor or gas escape	Lid not sealed properly; damaged O-ring; feeder overfilled.	Ensure lid is tight; inspect and replace O-ring; do not overfill feeder.
Water leaking from feeder	Loose lid; damaged O-ring; loose plumbing connections; cracked housing.	Tighten lid; replace O-ring; check and tighten plumbing; inspect for physical damage.
Rapid tablet dissolution	Adjustment valve too open; high water flow.	Close adjustment valve slightly; ensure proper bypass plumbing if applicable.

If you encounter issues not listed here or if solutions do not resolve the problem, contact Pentair customer support or a qualified pool technician.

## 8. SPECIFICATIONS

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- **Model Number:** R171240
- **Brand:** Pentair
- **Type:** Automatic Chlorine/Bromine Feeder
- **Capacity:** Up to 40 lbs of tablets
- **Pool Volume (Bromine):** Up to 61,000 gallons
- **Pool Volume (Trichlor):** Up to 332,000 gallons
- **Plumbing Connection:** 1-inch hard plumbing (unions not included)
- **Maximum Operating Pressure:** 50 PSI
- **Dimensions (Approximate):** 50.75 inches (Length) x 7.75 inches (Height) x 7.75 inches (Width)
- **Certifications:** NSF Listed
- **UPC:** 788379015008

## 9. WARRANTY INFORMATION

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The Pentair R171240 Rainbow HC-3340 Automatic Chlorine/Bromine Feeder comes with a **1-Year Limited Warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use and service.

For full warranty terms and conditions, please refer to the official Pentair warranty documentation included with your product or visit the Pentair website. Keep your proof of purchase for warranty claims.

## 10. CUSTOMER SUPPORT

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If you have any questions regarding the installation, operation, maintenance, or troubleshooting of your Pentair R171240 Rainbow HC-3340 feeder, please contact Pentair customer support.

- **Website:** Visit the official Pentair website for product information, FAQs, and support resources.
- **Contact:** Refer to your product packaging or the Pentair website for current contact information (phone numbers, email).

- **Professional Assistance:** For complex issues or installation, it is recommended to consult a certified pool professional.